#### FEDERAL AID SECTION 7 EVALUATION FORM

#### PHASE I: COMPLETED BY STATE

For federal assistance programs administered by the USFWS (Division of Federal Aid.)

State: Iowa Agency: Dept. of Natural Resources

Program: Wildlife Restoration

Grant Proposal, Agreement, or Amendment

Title and Number: Statewide Land Acquisition Program, FW-47-L

Grant Period: July 1, 2001 to June 30, 2007

Species/Critical Habitat: List species or critical habitat that occur within the action area1.

Not Applicable as per Kraig McPeak, Rock Island Ecological Services Field Office

II. Project Description: Describe project or, if referencing other documents (e.g. GP), prepare an executive summary.

The Iowa Department of Transportation is upgrading Iowa Highway 60 from LeMars, Iowa to the Minnesota county line. This project will involve the development of a highway bypass around the town of Ashton which will impact a portion (1.86 acres) of the Ashton Pits Wildlife Area. DOT will provide replacement land amounting to 42.36 acres as compensation for converting Ashton Pits Wildlife Area land to highway purposes. The replacement land will receive a Wildlife Restoration interest and be managed in perpetuity by DNR for the production and harvest of wildlife.

- III. State Review & Recommendation: Identify the effects of the proposed project on species/critical habitat occurring within the action area. Check (X) all applicable categories and list of species associated with each recommendation. (Note: Multiple recommendations on one form is acceptable.)
  - a) ANo Species/Critical Habitat Present@ This recommendation is appropriate when no listed/proposed/candidate species or designated/proposed critical habitat occur within the action area (no species list is required).

<sup>&</sup>lt;sup>1</sup>Action Area = all areas potentially affected (directly or indirectly) by the proposed action (50 CFR 402.02)

	b)	ANo Effect® This recommendation is appropriate when the proposed project will not directly or indirectly affect (negatively or beneficially) individuals of listed/proposed/candidate species or designated/proposed critical habitat of such species. List species applicable to this recommendation (or attach list):
X	c)	ANot Likely to Adversely Affect@ This recommendation is appropriate when the proposed action is not likely to adversely impact individuals of listed/proposed/candidate species or designated/proposed critical habitat of such species.  List species applicable to this recommendation and complete section IV (or attach list):
	<u>(</u> d)	ALikely to Adversely Affect@ This recommendation is appropriate when the proposed action is likely to adversely impact individuals of listed/proposed/candidate species or designated/proposed critical habitat of such species.  List species applicable to this recommendation and complete section IV (or attach list):
IV. Documentation of State Recommendation: For each ANot Likely to Adversely Affect@ and ALikely to Adversely Affect@ recommendation, attach an explanation of such finding for all applicable species or critical habitat. Documentation should include a discussion of each of the following: (1) species status - population trends, distribution in action area, (2) habitat status - critical or noncritical, species use such as breeding migrating, feeding in action area, and (3) impacts of action - how the proposed action will affect species/critical habitat (consider direct, indirect, and cumulative impacts).		
DOT has performed surveys and consulted with DNR and FWS concerning potential impacts to state and federal threatened and endangered species. The results of these surveys and coordination efforts concluded that no state or federal listed or candidate species would be impacted by the proposed project.		
A list of federally listed species in Iowa is attached.		
State Signature: (signature indicates impacts on all federally listed species within the applicable State have been considered and documented)		
Sta	te E	Indangered Species Coordinator: Hany Mowell Date: 7/23/03
Sta	te F	ederal Aid Coordinator: Mike Haldell Date: 8/15/63

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# VI. Review & Compliance Provisions

#### Threatened & Endangered Species

This grant will be in full compliance with the Endangered Species Act of 1973. Implementation of this grant will not jeopardize the continued existence of any federally listed threatened, endangered, or candidate species that occur in Iowa, or result in the destruction or adverse modification of any designated critical habitat of these species. Work plans prepared for each annual segment of Grant Proposal FW-43-D are reviewed internally to determine potential impacts to both state and federal threatened and endangered species. The DNR's Natural Areas Inventory Program (NAI) is responsible for coordinating the state's threatened and endangered species program. Staff botanists and zoologists review projects, conduct surveys, and maintain a database which documents the location of state and federal threatened and endangered species throughout the state. Site records from the NAI database are provided to management biologists for use in area planning. Additionally, DNR biologists and technicians are expected to inform NAI staff of any new occurrences they discover, and monitor existing habitats at known sites.

Work plans accompanied by aerial photos and work activity descriptions are provided to NAI staff annually for review and comment. Work activities are not initiated until the review has been completed and all NAI staff comments/concerns have been addressed. The NAI staff has requested review of all work activities that cause soil disturbance and involve:

- 1. Native vegetation such as prairie, wetland, unplowed pasture, or grassland that has been idled for more than two years.
- 2. Any clearing or TSI work in woodlands or riparian areas, except aspen regeneration cuts in areas that were formerly cropland or pasture.
- 3. Mowing, burning, or spraying of entire fields of native grasses and prairies.
- 4. Conversion of grassland to other habitat types particularly in southern Iowa.

A table documenting T&E coordination and the results of this coordination will be included in the annual performance report for each segment of FW-43-D.

Eight animal and five plant species are federally listed in Iowa. Additionally, two animal species are listed as a candidate species. These species include:

Bald Eagle (<u>Haliaeetus leucocephalus</u>) - Status: Threatened — Bald eagle populations are continuing to increase throughout the country. From fewer than 450 nesting pairs in the early 1960's, there are now over 6,500 adult bald eagle nesting pairs and an unknown number of young and subadults. In 1995, the FWS changed their status from endangered to threatened signaling that a population recovery was well underway. This recovery is very evident in Iowa. The bald eagle was a regular nesting bird in Iowa at the time of settlement. The last known nesting was believed to have occurred in 1905. Initial nesting was again documented in 1977. In 1991 there were 11 nesting attempts with 8 being successful. In 1998 there were 84 nesting

attempts with 47 successful nests that produced 82 young in 33 counties. Bald eagles are expanding their range in Iowa particularly along the border rivers and major interior rivers. They have now been documented in 58 counties, many of which are in the eastern one-third of the state. Important eagle wintering areas include ice-free areas below locks and dams along the Mississippi River. Other wintering and resting sites include wildlife areas and national refuges, which are managed primarily for waterfowl. Several wildlife areas managed through this project are expected to receive both nesting and wintering use by eagles. Nest locations have been documented on the following areas which are managed through this project: Pool Slough, Canoe Creek, Iowa River Corridor, Rathbun, Odessa, Hanging Rock, and Green Island Wildlife Areas, and on Mud Hen Lake and New Albin Lake along the Mississippi River. Large reservoir sites such as Coralville, Saylorville, Red Rock, and Rathbun Wildlife Areas and major inland rivers also offer potential nest sites. These four reservoirs in addition to the Riverton, Forney Lake, Odessa, and Otter Creek Wildlife Areas are important sites used by eagles during migration. Management efforts, including the establishment of refuge areas and TSI plans, which identify nesting and roosting trees, are intended to protect habitat for bald eagles.

# Section 7 Recommendation: Not Likely To Adversely Affect

2. Interior Least Tern (Sterna antillarum) - Status: Endangered - This species nests in a broad portion of the central United States on sandbars and barren areas along rivers. Interior least terms breed in isolated areas along the Missouri, Mississippi, Ohio, Red, and Rio Grande river systems. Loss of habitat due to the construction of reservoirs, channelization, and changes in water flows has contributed to their decline. In Iowa, the interior least tern currently nests at two sites; one near Council Bluffs and one near Sioux City. Both sites are privately owned and consist of fly-ash deposits from power plants. Historical records show that birds have been reported at the Willow Slough, Forney Lake, Riverton, and Decatur Bend Wildlife Areas. All of these areas are managed through this project as uplands or waterfowl production and harvest Management of these areas should not impact this species, particularly migrants. Special efforts have been made to create nesting habitat at DeSoto National Wildlife Refuge in an effort to establish a breeding population there. Continued monitoring of the nest sites at Council Bluffs and Sioux City should help to identify additional protection measures and management practices that could be used to benefit this species.

# Section 7 Recommendation: Not Likely To Adversely Affect

3. Piping Plover (<u>Charadrius melodus</u>) - Status: Threatened - Historical distribution of the piping plover includes the Atlantic Coast from Newfoundland to North Carolina, the Great Lakes, and the Northern Great Plains of the United States and Canada. This species nests primarily along the shorelines of the Great Lakes, the shores of lakes and rivers in the Northern Great Plains, and along the Atlantic Coast. Nests are placed above the recent high-water mark and are usually in bare or sparsely vegetated

areas. Species decline in Iowa is most attributable to the loss of sandy beaches and modification of river flows resulting from the channelization of the Missouri River. Piping plovers are also very sensitive to the presence of humans. Too much disturbance cause parent birds to abandon their nests. There are two known breeding sites in Iowa; one near Council Bluffs and one near Sioux City. Both are fly-ash deposits associated with power plants. Sightings have been recorded at or near public wildlife areas including Coralville Reservoir, Willow Slough, Union Slough NWR, Red Rock Reservoir, and Rathbun Reservoir. Migrating birds are sighted in most years. Management of public wildlife areas will not impact this species.

# Section 7 Recommendation: Not Likely To Adversely Affect

4. Indiana Bat (Myotis sodalis) - Status: Endangered - The range of the Indiana bat is the eastern United States and as far west as Iowa, Kansas, and Oklahoma. In Iowa, the Indiana bat has been reported in 15 southern Iowa counties and Dubuque County in northeast Iowa. The southern half and eastern third of the state are considered as potential habitat. Indiana bats occur in Iowa during summer months and form maternity colonies under the bark of living or dead trees. These colonies are usually located in wooded areas along perennial streams and rivers. Winter hibernaculae includes caves and mines in southern and eastern states other than Iowa. To date, Indiana bats have been documented on the Mt. Ayr, Sand Creek, and White Pine Hollow Wildlife Areas, as well as Stephens State Forest. Habitat conditions are conducive for their occurrence on several DNR wildlife areas including Soap Creek, DeKalb, Van Buren, Eldon, Lake Sugema, Rathbun, and Red Rock Wildlife Areas. Management plans for these areas, and other wildlife areas with suitable habitat, recognize the need to protect riparian corridors within 200 feet of perennial streams. Although timber harvest is not planned for these areas, any incidental tree removal will avoid trees greater than 9" dbh during the period of April 1 through September 30.

# Section 7 Recommendation: Not Likely To Adversely Affect

5. Pallid Sturgeon (Scaphirhynchus albus) - Status: Endangered - This fish inhabits large, free-flowing rivers with rocky or sandy bottoms and strong currents. The primary range in Iowa includes the Missouri River and lower Mississippi River. Populations are considered scarce in the Missouri River system and scarce, but slightly more common in the Mississippi River. Pallid Sturgeon populations have declined sharply over the past 30 years. This decline has coincided with numerous habitat modifications along the Missouri and Mississippi Rivers. These modifications include the construction of locks and dams, changes in water flows, reduction of habitat diversity, and loss of spawning habitat. Excessive harvest, pollution, and hybridization may also have contributed to its decline. Recent recovery efforts include artificial propagation in Gavins Point NFH hatchery in South Dakota. Hatchery reared pallid sturgeon are being released in the Missouri River system near it's confluence with the Yellowstone River and above Ft. Peck Reservoir in Montana.

Little if any work is performed on the Missouri or Mississippi Rivers through this project.

Section 7 Recommendation: No Effect

6. Topeka Shiner (Notropis topeka) - Status: Endangered. Species was formerly widespread in the western tributaries of the Mississippi River, from central Missouri to southern Minnesota, west to southeastern South Dakota and western Kansas. It's range is now restricted to small areas in Kansas, Missouri, Iowa, Nebraska, South Dakota, and Minnesota. In Iowa its range includes the Rock River, the Raccoon River and their major tributaries. Recent studies by Menzel, 1999, Report to DNR, documented Topeka shiners from the Cedar Creek, Purgatory Creek, and Camp Creek systems in Calhoun County, Rock River system in Lyon and Sioux counties, Little Rock River in Osceola County, West Buttrick and Hardin Creeks in Greene County, Raccoon River and Swan Lake Branch in Dallas County, Raccoon River in Carroll County, and Indian Creek and Black Hawk Lake outlet in Sac County. These recent surveys have confirmed the distribution pattern shown for the species by its distributional map in the book "Iowa Fish and Fishing". Reasons for decline include land and water practices that alter the physical and biological characteristics of streams. Detrimental practices include channelization, cultivation, clearcut logging, intensive grazing, and similar activities which increase sedimentation, reduce water quality, and increase water temperature. Preferred habitat includes moderately clear and clean upland streams having substrates of gravel, sand, rubble, and bedrock and pools or isolated oxbows which maintain water year around. The species has not been found on any DNR areas managed through this project.

Section 7 Recommendation: Not Likely To Adversely Affect

7 Iowa Pleistocene Land Snail (Discus macclintocki) - Status: Endangered - The habitat of this species is limited to cold air talus slopes, which are developed over the entrances to small caves and fissures. These slopes are most likely to occur in large porous carbonate rock units with a north facing aspect and a thin litter layer which provides moisture, humidity, and temperatures necessary for foraging and breeding. The Pleistocene snail is currently known to exist at 30 sites in Iowa and Illinois. In Iowa, it occurs in Allamakee, Clayton, Clinton, Fayette, Jackson, and Dubuque Counties. It has been found on three areas, Pine Creek, LaSoya and White Pine Hollow Wildlife Areas, all of which are managed through this project. The LaSoya tract has the second largest estimated population of Pleistocene Land Snail in Iowa. This area was purchased with Section 6 funding and DNR funding for the purpose of protecting this species and it's habitat. DNR does have an access easement for management and research purposes. Primary reasons for decline include climatic change and human disturbances such as overgrazing, logging, road construction, and mining which have reduced available habitat. The primary management strategy used on wildlife areas is site protection and establishment of undisturbed buffer zones around known sites.

### Section 7 Recommendation: Not Likely To Adversely Affect

8. Higgins' Eye Pearly Mussel (<u>Lampsilis higginsi</u>) - Status: Endangered - Historically, this species was found in the Cedar, Iowa, and Wapsipinicon Rivers, but is no longer found there. Abundant populations formerly occurred throughout the upper Mississippi River. It now occurs in low numbers in the upper Mississippi River from Fairport to Lake Pepin and the Rock, St. Croix and Wisconsin Rivers. The Higgins' eye pearly mussel prefers large rivers with deep water and substrates of sand/gravel, gravel, and clay/sand. Natural hosts include fresh-water drum, sauger, largemouth bass, smallmouth bass, yellow perch, and walleye. Reasons for decline include pollution, substrate destruction, and competition from non-native Zebra mussels. Protection of known populations in the Mississippi River has been the primary conservation effort. More recently, efforts are underway to propagate mussels in the Genoa National Fish Hatchery for release in suitable streams and rivers. Surveys for additional populations have also been conducted on larger, inland rivers in Iowa, but with little success. This species is not known to occur on any areas managed through this project.

# Section 7 Recommendation: No Effect

9. Western Prairie Fringed Orchid (Platanthera praeclara) - Status: Threatened - This species occupies moist to wet native prairie areas, including prairie remnants along roads and railroad rights-of way. It formerly occurred in the Midwest, Great Plains, and Manitoba, Canada. The western prairie fringed orchid currently occurs on 15 sites in 12 Iowa counties. It occurs on five areas managed through this project, -Hayden Prairie, Kalsow Prairie, Kirchner Prairie, Steele Prairie, and Sheeder Prairie. All of these areas, except Kirchner Prairie, have been afforded state preserve status and are managed according to a management plan prepared by DNR botanists and staff specialists. Kirchner Prairie is managed in the same manner. The goals of these management plans are site protection and management techniques such as controlled burning to maintain native vegetation. Seed is also harvested from these areas and used to establish prairie on newly acquired DNR areas and federally owned Waterfowl Production Areas. There are historic records of this species on Anderson Prairie and Cayler Prairie, but surveys over the past several years have not located it at these sites. The primary reason for decline is the conversion of prairie to agriculture, roads, and other developments. Pollination appears to be rare on the small prairie remnants that remain.

Controlled burning and seed harvest represent potential adverse effects to these species even though controlled burning is necessary for maintaining the prairie ecosystem and seed harvest provides an opportunity to increase the presence of prairie ecotype on other DNR properties. A Biological Opinion was prepared by the FWS (Rock Island field office) to evaluate these management and seed harvest practices. This opinion provided conservation measures that will be implemented by

DNR for the purpose of minimizing impacts to this species. The conservation measures that will be implemented on DNR areas with known populations are:

- Only dormant season controlled burning will be employed. Areas with known populations will not be burned after April 15, nor after April 20 in northern Iowa.
   DNR botanist will monitor plant emergence for the purpose of adjusting these dates, if necessary.
- Mechanical harvest of prairie seed will commence no earlier than mid-September.
   Not every site will be harvested every year, and hand harvest will be used where possible.

# Section 7 Recommendation: Not Likely To Adversely Affect

10. Eastern Prairie Fringed Orchid (<u>Platanthera leucophaea</u>) - Status: Threatened - The eastern prairie fringed orchid and western prairie fringed orchid are very similar physically and share similar habitat. They prefer mesic to wet unplowed tallgrass prairie. This species is known in seven states mostly east of the Mississippi River. It occurs at three sites in Iowa; one of which is Muskrat Slough, a wildlife area managed through this project. Reasons for decline are loss of suitable habitat, mostly through conversion to cropland. Site protection and testing of management techniques, such as controlled burning, are the primary conservation efforts in place for this species of orchid.

Controlled burning and seed harvest represent potential adverse effects to these species even though controlled burning is necessary for maintaining the prairie ecosystem and seed harvest provides an opportunity to increase the presence of prairie ecotype on other DNR properties. The DNR intends to employee the same management strategies and conservation measures identified for the Western Prairie Fringed Orchid. The conservation measures that will be implemented on DNR areas with known populations are:

- Only dormant season controlled burning will be employed. Areas with known populations will not be burned after April 15, nor after April 20 in northern Iowa. DNR botanist will monitor plant emergence for the purpose of adjusting these dates, if necessary.
- Mechanical harvest of prairie seed will commence no earlier than mid-September.
   Not every site will be harvested every year, and hand harvest will be used where possible.

# Section 7 Recommendation: Not Likely To Adversely Affect

11. Mead's Milkweed (<u>Asclepias meadii</u>) - Status: Threatened - This species occurs in Iowa, Illinois, Missouri, and Kansas, and was formerly known in Indiana and Wisconsin. Its preferred habitat is moist tallgrass prairie with fairly high species diversity. Mead's milkweed currently occurs on six sites in Adair, Clarke, Decatur, Taylor, and Warren counties. The conversion of prairie has nearly eliminated the habitat for this species in Iowa. The prairie remnants that remain may be too small to

support good populations of pollinators. It is not known to exist on any wildlife areas managed through this project.

Section 7 Recommendation: No Effect

12. Prairie Bush Clover (Lespedeza leptostachya) - Status: Threatened - Its range includes fewer than 40 sites in 23 counties of Iowa, Illinois, Minnesota, and Wisconsin. Its habitat includes native prairie and pastures that have retained native prairie species. In Iowa, some of the largest populations occur in the "core" area, which includes Dickinson and Emmet counties. Core areas are defined as being within the Des Moines lobe of the Wisconsin stage of glaciation. The current range includes fifteen sites in twelve counties in north-central and south-central Iowa. Nine of these sites are on wildlife areas managed through this project; - Anderson Prairie, Cayler Prairie, Hayden Prairie, Kirchner Prairie, Little Sioux Wildlife Area, Santee Prairie, Waterman Prairie, Chritopherson Slough, and Stephens State Forest. Most of these areas have been designated as state preserves and are afforded protection by state law. Management plans developed for these areas focus on site protection and maintenance of the prairie ecosystem through controlled burning. Seed is harvested from these areas and used to establish prairie on newly acquired DNR areas and federally owned Waterfowl Production Areas. Future management may include grazing and mowing to help determine the effects of these activities on reproduction and survivorship.

Controlled burning and seed harvest represent potential adverse effects to these species even though controlled burning is necessary for maintaining the prairie ecosystem and seed harvest provides an opportunity to increase the presence of prairie ecotype on other DNR properties. A Biological Opinion was prepared by the FWS (Rock Island field office) to evaluate these management and seed harvest practices. This opinion provided conservation measures that will be implemented by DNR for the purpose of minimizing impacts to this species. The conservation measures that will be implemented on DNR areas with known populations are:

- Only dormant season controlled burning will be employed. Areas with known
  populations will not be burned after April 15, nor after April 20 in northern Iowa.

  DNR botanist will monitor plant emergence for the purpose of adjusting these
  dates, if necessary.
- If the harvest height of prairie would reach the level of this species, mechanical harvest will 1) wait until late-September, or 2) harvest no more than 70% of a given area. The same site will not be harvested every year.

# Section 7 Recommendation: Not Likely To Adversely Affect

13. Northern Wild Monkshood (<u>Aconitum noveboracense</u>) - Status: Threatened - Northern wild monkshood is widely distributed from northeastern Iowa to northeastern Ohio and New York. It is typically found on north facing shaded cliffs and talus slopes with cool soil conditions, cold air drainage or cold groundwater flowage. These conditions offer high humidity levels and relatively constant

temperatures needed for plant growth. In Iowa, this species is found on 71 sites in Allamakee, Clayton, Delaware, Dubuque, and Jackson counties with most occurring on public lands. Four areas managed through this project, White Pine Hollow, LaSoya, Roberts Creek, and Pine Creek Wildlife Area, have known populations. Roberts Creek and LaSoya have the largest and the fourth largest populations of monkshood in the state. Both of these areas were purchased with federal Section 6 money and DNR funding for the purpose of protecting these sites. Management efforts are directed at protecting the talus slopes where these plants are located. Northern wild monkshood's decline can be traced to extensive harvest for medicinal purposes during early settlement times, and later to habitat deterioration resulting from human induced activities such as grazing, clearing, development, and herbicide use.

### Section 7 Recommendation: Not Likely To Adversely Affect

14. Eastern Massasauga Rattlesnake (Sistrurus catenatus catenatus) Status: Candidate The massasauga's range is from western New York and southern Ontario extending westward in southwestern Iowa and extreme western Missouri. They have been reported to occur in several habitats including wet prairie, fens, sedge meadows, peatlands, coniferous forest, meadows, and oldfields. Preferred habitats include an open vegetative structure in close proximity to water, particularly shallow wetland systems. Massasauga numbers have declined throughout their range primly due to habitat loss and persecution. In Iowa, massasaugas are associated primarily with wetland areas adjacent to perennial streams. Three areas managed through this project, Sweet Marsh, Willow Slough, and Red Cedar Wildlife Area have known populations. Two other areas, Aldo Leopold Wetland Complex and Nichols Marsh (private area) contain suitable habitat and will be surveyed. All of these areas are managed primarily for the production and harvest of waterfowl. Management practices on these areas include periodic water level manipulations, controlled burning, mowing, levee maintenance and reconstruction, and road maintenance.

Water level manipulations, controlled burning, levee maintenance, road maintenance, and mowing represent potential adverse impacts to the massasauga. A Conference Opinion was prepared by the FWS (Rock Island Field Office) to evaluate these management practices and to provide recommendations in the form of both reasonable and prudent measures and conservation measures concerning future management of these areas. The reasonable and prudent measures that will be implemented on areas where massasaugas are present to minimize adverse impacts to this species are:

- Signs will be posted warning the public that snakes are present and not harm or harass them.
- DNR shall investigate the possible effects of water level drawdowns on hibernating snakes. A three year study was contracted in 2001 with Dr. James Christianson and Mr. Terry Van DeWalle for the purpose of evaluating water level drawdowns. Results from this study will be used to develop a waterlevel management plan that minimizes adverse impacts to massasaugas.

DNR will monitor all of its management activities for effects on massasaugas.

Additionally, the following conservation measures will be employed:

- Controlled burning will be conducted after November 1 and before the six-inch soil temperature reaches 60°F for dikes and wetland areas.
- Mowing will be accomplished either during the November 1 to March 31 period, or during summer days of 80°F or warmer between 11:00 a.m. and 3:00 p.m. Mowers will be set to cut at least 4 inches or higher.
- The forest edge will be maintained as open as possible. Brush piles will be retained to provide cover.
- Small clusters of trees and shrubs can be left in wet meadow and prairie habitats to provide escape and thermal cover.
- Vehicle use of dikes will follow the same recommendations for burning and mowing unless an ATV or other vehicle with similar visibility is used, or during emergencies.

### Section 7 Recommendation: Not Likely To Adversely Affect

15. Dakota Skipper (Hesperia dacotae) — Status: Candidate. Historical range is not precisely known, but probably included unbroken grasslands of the north-central United States and south-central Canada. The most significant remaining populations occur in western Minnesota, northeastern South Dakota, and north-central and southeastern South Dakota. Habitat includes high-quality native prairie. Low, wet prairies and upland, dry prairies dominated by bluestem grasses are primary habitat types. In both of these habitat types, wildflowers such as wood lily, harebell, and smooth camas (wet prairies) and pale purple coneflower, upright coneflower, and blanketflower (dry prairies) are preferred species. Populations have declined because of widespread conversion of native prairie and due to isolation of remaining populations. Currently a state listed endangered species, the Dakota Skipper was last documented at Cayler Prairie, Dickinson County, in 1992. In all likelihood, this species no longer inhabits Iowa.

Section 7 Recommendation: Not Likely To Adversely Affect